

130 index 015



PATENT
ATTORNEY DOCKET NO.: 056921-5137

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

IN PATENT APPLICATION of:

DAVIS et al.

Application No.: 09/869,925

Filed: July 9, 2001

FOR: COLCHINOL DERIVATIVES AS
VASCULAR DAMAGING AGENTS

)
)
)
)
) Group Art Unit: 1653
)
) Examiner: Lukton, David
)
)
)

Commissioner for Patents
U.S. Patent and Trademark Office
2011 South Clark Place
Customer Window
Crystal Plaza Two, Lobby, Room 1B03
Arlington, VA 22202

Date: September 8, 2003

Sir:

INFORMATION DISCLOSURE STATEMENT

Citation of Related U.S. Patent Applications

The Examiner's attention is directed to the following related co-pending U.S. patent applications:

Examiner's Initials	Inventor	U.S. Serial No.	U.S. Filing Date	PCT Publication No.	PCT Publication Date
	Davis et al.	09/869,925	08/23/2001	WO 00/40529	July 13, 2000
	Dougherty	09/477,805 USP 6,423,753	01/05/2000	WO 99/02166	Jan. 21, 1999
	Arnould et al.	10/332,129	01/06/03	WO 02/04434	Jan. 17, 2002
	Arnould	10/332,271	01/07/2003	WO 02/08213	Jan. 31, 2002

A copy of the specification and claims for each application, either in the form of a U.S. patent issued on that application and/or the published PCT application from which such application was filed, has previously been provided or is being filed herewith.

PLEASE DO NOT PRINT the above information on the patent resulting from the subject application.

Consideration of each listed application is earnestly solicited since unpublished patent applications are contemplated as IDS material; see the exception in Rule 98(a)(2)(iii) and note the penultimate sentence of MPEP 609.

Further, in keeping with MPEP 609, Subsec. C(2), 2nd para., line 10 to end of the paragraph (especially note lines 18-25) PLEASE RETURN A COPY OF THIS LETTER with the Examiner's initials adjacent each above listing so that applicant will know that each listed application has been considered as required by PTO policy.

Citation of Documents

Attached is a Form PTO-1449 listing the enclosed documents.

The present Information Disclosure Statement is being filed before the mailing date of the first Office Action on the merits, and therefore no certification under 37 CFR §1.97(e) or fee under 37 CFR §1.17(p) is required.

This Information Disclosure Statement is intended to be in full compliance with the rules, but should the Examiner find any part of its required content to have been omitted, prompt notice to that effect is earnestly solicited, along with additional time under Rule 97(f), to enable Applicant to fully comply.

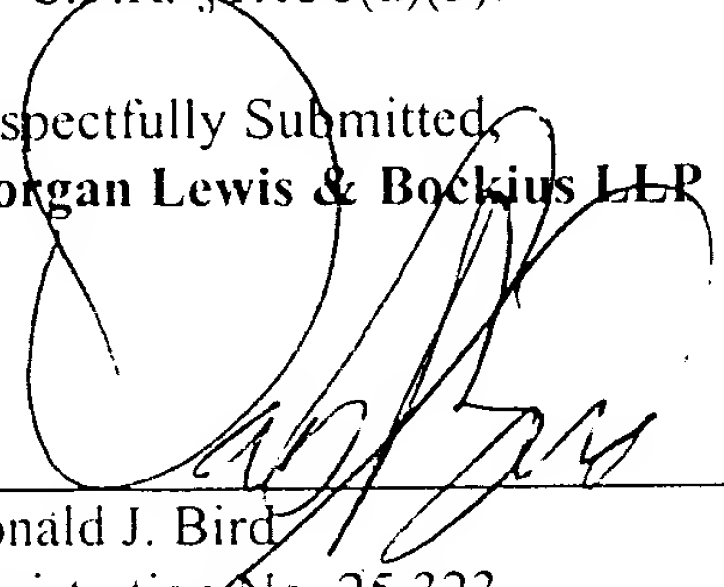
Consideration of the foregoing and enclosures plus the return of a copy of the herewith filed Form PTO-1449 with the Examiner's initials in the left column per MPEP 609 along with an early action on the merits of this application are earnestly solicited.

Except for issue fees payable under 37 C.F.R. §1.18, the Director is hereby authorized by this paper to charge any additional fees during the entire pendency of this application including fees due under 37 C.F.R. §§1.16 and 1.17 which may be required, including any required extension of time fees, or credit any overpayment to Deposit Account No. 50-0310. This paragraph is intended to be a **CONSTRUCTIVE PETITION FOR EXTENSION OF TIME** -in accordance with 37 C.F.R. §1.136(a)(3).

Respectfully Submitted,
Morgan Lewis & Bockius LLP

Date: September 8, 2003
Morgan Lewis & Bockius LLP
Customer No. **09629**
1111 Pennsylvania Avenue, N.W.
Washington, D.C. 20004
Tel. No.: 202-739-3000
DJB:mk

By:



Donald J. Bird
Registration No. 25,323
Tel. No.: (202) 739-5320
Fax No.: (202) 739-3001

FORM PTO-1449 (modified)
To: U.S. Department of Commerce
Patent and Trademark Office

Attorney Docket No.

Client Ref.

056291-5137

Z70457-1P US

INFORMATION DISCLOSURE STATEMENT
BY APPLICANT

Applicant: Davis et al.

Appln. No.: 09/869,925

Filing Date: July 9, 2001

Date: September 8, 2003

Page 1 of 9

Examiner: Lukton, David

Group Art Unit: 1653

U.S. PATENT DOCUMENTS

Examiner's Initials*	Document Number	Date MM/YYYY	Name (Family Name of First Inventor)	Class	Sub Class	Filing Date (if appropriate)
	AR	5,760,092	06/1998	Timashef et al.		
	BR	5,843,910	12/1999	Bombardelli et al.		
	CR	5,561,122	10/1996	Pettit		
	DR	6,423,753 B1	07/2002	Dougherty		

FOREIGN PATENT DOCUMENTS

		Document Number	Date MM/YYYY	Country	Inventor Name	English Abstract		Translation Readily Available	
						Enclosed	No	Enclose	No
	ER	4.685 M	01/1967	France	Roussel-Uclaf				
*	FR	97/47577	12/1997	WIPO	Bombardelli				
*	GR	99/02166	01/1999	WIPO	Dougherty				
	HR	00/48606 A1	08/2000	WIPO	Pero et al.				
	IR	39-19634	09/1964	Japan	Nakamura				X
	JR	39-19635	09/1964	Japan	Nakamura				X

OTHER (Including in this order Author, Title, Periodical Name, Date, Pertinent Pages, etc.)

KR	Abu Zarga et al., "New Natural Dibenzocycloheptylamine Alkaloids": A Possible Catabolic Route for the Colchicine Alkaloids", J. Nat. Prod., (1991), 54(4), 936-940				
LR	Al-Tel et al., "New Natural Colchicinoids: Indications of Two Possible Catabolic Routes for the Colchicine Alkaloids", J. Nat. Prod., (1990) 53 (3), 623-629				
MR	Banwell et al., "Total Syntheses of the Structures Assigned to Salimine and Jerusalemene, Alkaloids from <i>Colchicum decaisnei</i> Boiss. (Liliaceae)", J. Chem. Soc., Chem. Commun., (1994) (22) 2647-2649				
NR	Banwell, et al., "Synthesis and Tubulin-Binding Properties of Some AC- and ABC-Ring Analogues of Allicolchicine", Aust J Chem., (1992), 45, 1967-1982				
OR	Battersby et al., "Biosynthesis. Part 26 ¹ . Synthetic Studies on Structural Modification of Late Biosynthetic Precursors for Colchicine", J. Chem. Soc., Perkin Trans 1, (1983), (12), 3053-3063				
PR	Boger et al., "Thermal Reactions of Cyclopropanone Ketals. Application of . . . Total Synthesis of Colchicine", J. Am. Chem. Soc., (1986) (108 (21), 6713-6719				
QR	Boyé et al. "185. Deaminocolchinyll Methyl Ether: Synthesis from . . . Effects of Deaminocolchinyll Methyl Ether and Dehydro Analogs", Helv. Chem. Acta, (1989), 72 (8), 1690-1696				

Examiner

Date Considered:

*EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP § 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

FORM PTO-1449 (modified)
To: U.S. Department of Commerce
Patent and Trademark Office

Attorney Docket No.

Client Ref.

056291-5137

Z70457-1P US

INFORMATION DISCLOSURE STATEMENT
BY APPLICANT

Applicant: Davis et al.

Appln. No.: 09/869,925

Filing Date: July 9, 2001

Date: September 8, 2003

Page 2 of 9

Examiner: Lukton, David

Group Art Unit: 1653

U.S. PATENT DOCUMENTS

Examiner's Initials*	Document Number	Date MM/YYYY	Name (Family Name of First Inventor)	Class	Sub Class	Filing Date (if appropriate)
	AR	3,442,953	Muller et al.			
	BR	5,880,160	Bombardelli et al.			
	CR	5,973,204	Bombardelli			

FOREIGN PATENT DOCUMENTS

		Document Number	Date MM/YYYY	Country	Inventor Name	English Abstract		Translation Readily Available	
						Enclosed	No	Enclose	No
	DR	00/48606 A1	08/2000	WIPO	Pero et al.				
	ER	02/04434	01/2002	WIPO	Arnould et al.				
	FR	02/08213	01/2002	WIPO	Arnould				

OTHER (Including in this order Author, Title, Periodical Name, Date, Pertinent Pages, etc.)

	GR	Boyé et al. "Potential Covalent Markers of the Colchicine-Binding-Site . . . Isothiocyanato Groups", Med.Chem. Res., (1991), 1 (2), 142-150						
	HR	Boye et al., "Natural Products. Antitubulin effect of congeners of <i>N</i> -acetylcolchinyll . . . of demethoxy analogues of deaminocolchinyll methyl ether", Can. J. Chem., (1992), 70 (5), 1237-1249						
	IR	Boyé et al., "Synthesis of ¹⁴ C Labelled Electrophilic Ligands of the Colchicine . . . 9-Deoxy- <i>N</i> -Acetylcolchinol.", J. Labelled Compd Radiopharm., (1993) 33(4), 293-299						
	JR	Brecht et al., "(-)-(M,7S)-Colchicine and (-)-(M,7S)-10-Ethylthiocolchicide/Alkyne . . . Consecutive [4+2] and [3+2] Cycloadditions", Eur. Jour. Org. Chem., (1998) (11) 2451-2460						
	KR	Brossi et al., "aS, 7S-absolute configuration of natural (-)-colchicine and allocongeners", FEBS Lett., (1990), 262 (1), 5-7						
	LR	Deinum et al., "Synthesis and Binding to Tubulin of an Allocolchicine Spin Probe." Acta Chem. Scand, Ser B (1981) B35 (10), 677-681						
	MR	Dilger et al., "Arbeitsvorschriften und Megwerte Procedures and Data Formaldehyd-O-oxid und Colchicine: ein eleganter Zugang zu Allocolcicinen", J. Prakt Chem./Chem-Ztg, (1998), 340 (5), 468-471 (in German)				x		x
	NR	Dokl Akad Nauk USSR, (1991) (4) 33-35					x	x
	OR	Dumortier et al., "Alternations of Rings B and C of Colchicine Are Cumulative in Overall Binding to Tubulin but Modify Each Kinetic Step", Biochemistry, (1996), 35 (49), 15900-15906						

Examiner

Date Considered:

*EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP § 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

FORM PTO-1449 (modified) To: U.S. Department of Commerce Patent and Trademark Office				Attorney Docket No.		Client Ref.		
				056291-5137		Z70457-1P US		
INFORMATION DISCLOSURE STATEMENT BY APPLICANT				Applicant: Davis et al.				
				Appln. No.: 09/869,925				
				Filing Date: July 9, 2001				
				Examiner: Lukton, David		Group Art Unit: 1653		
Date: September 8, 2003 Page 3 of 9								
U.S. PATENT DOCUMENTS								
Examiner's Initials*		Document Number	Date MM/YYYY	Name (Family Name of First Inventor)		Class	Sub Class	Filing Date (if appropriate)
	AR	6,080,739	06/2000	Bombardelli				
	BR							
	CR							
FOREIGN PATENT DOCUMENTS								
		Document Number	Date MM/YYYY	Country	Inventor Name	English Abstract		Translation Readily Available
						Enclosed	No	Enclose
	DR							
	ER							
	FR							
OTHER (Including in this order Author, Title, Periodical Name, Date, Pertinent Pages, etc.)								
	GR	Fernholz, "Über die Umlagerung des Colchicins mit Natriumalkoholat und die Struktur des Ringes C ¹ ", Justus Liebigs Ann. Chem., CODEN: JLACBF, 568, (1950), 63-82						
	HR	Fitzgerald, "Molecular Features of Colchicine Associated with Antimitotic Activity and Inhibition of Tubulin Polymerization", Biochemistry Pharmacology, (1976), 25, 1383-1387						
	IR	Ghera et al., "Total Synthesis of Lignan (±)-Schizandrin", J. Chem. Soc., Chem. Commun., (1978) (11), 480-481						
	JR	Hahn et al., "Synthesis and Evaluation of 2-Diazo-3,3,3-Trifluoropropanoyl . . . Photochemistry, and Tubulin Binding", Photochem. Photobiol., (1992) 55 (1), 17-27						
	KR	Han et al., "Distances between the Paclitaxel, Colchicine, and Exchangeable GTP Binding Sites on Tubulin", Biochemistry, (1998), 37 (19), 6636-6644						
	LR	Hastie, "Spectroscopic analyses of colchicinoid-tubulin complexes", Cellular Pharmacology, (1993), 1 (Suppl. 1), S17-S21						
	MR	Hastie, "Spectroscopic and Kinetic Features of Alcolcolchicine Binding to Tubulin", Biochemistry, (1989), 28 (19), 7753-7760						
	NR	Hrbek et al., "Circular Dichroism of Alkaloids of Colchicine Type And Their Derivatives", Collect. Czech. Chem. Commun., (1982), 47 (8), 2258-2279						
	OR	Iorio, "Contraction of the Tropolonic Ring of Colchicine by Hydrogen Peroxide Oxidation", Heterocycles, (1984), 22 (10), 2207-2211						
Examiner					Date Considered:			
*EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP § 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.								

FORM PTO-1449 (modified) To: U.S. Department of Commerce Patent and Trademark Office				Attorney Docket No.		Client Ref.		
				056291-5137		Z70457-1P US		
INFORMATION DISCLOSURE STATEMENT BY APPLICANT				Applicant: Davis et al.				
				Appln. No.: 09/869,925				
				Filing Date: July 9, 2001				
				Examiner: Lukton, David		Group Art Unit: 1653		
Date: September 8, 2003 Page 4 of 9								
U.S. PATENT DOCUMENTS								
Examiner's Initials*		Document Number	Date MM/YYYY	Name (Family Name of First Inventor)		Class	Sub Class	Filing Date (if appropriate)
	AR							
	BR							
	CR							
FOREIGN PATENT DOCUMENTS						English Abstract		Translation Readily Available
		Document Number	Date MM/YYYY	Country	Inventor Name		Enclosed	No
	DR							
	ER							
	FR							
OTHER (Including in this order Author, Title, Periodical Name, Date, Pertinent Pages, etc.)								
	GR	Izv Akad Nauk Turkm SSR, Ser Fiz-Tekh, Khim Geol Nauk, (1976), (1), 70-73					x	x
	HR	Kiselev et al., "Benzenoid Rearrangement of Colchicine by the Action of Ethylene Glycol", Zh. Org. Khim., (1977), 13 (11), 2337-2342 (in Russian) (English translation attached)						
	IR	Kiselev et al., "Derivatives of Aminocolchicide" Obshch. Khim., (1970), 40 (4), 914-915 (in Russian, English translation attached)						
	JR	Kiselev, "Derivatives of Aminocolchicide. VII", Zh. Zh. Obshch. Khim., (1971), 41 (2) 464-466 (in Russian, English translation attached)						
	KR	Kita et al., "Non-phenolic oxidative coupling of phenol ether derivatives using phenyliodine (III) bis(trifluoroacetate)", Chem. Commun. (Cambridge), (1996) (12), 1481-1482						
	LR	Leiter et al., "Damage Induced in Sarcoma 37 with Chemical Agents. III. Colchicine Derivatives Related to Trimethylcolchicinic Acid and to Colchicol", J. Natl. Cancer Inst., (1952), 13, 379-392						
	MR	Mackay et al., "Structures of Colchicine Analogues. IV. An Aminodibromoalcolchicine, C ₂₀ H ₂₂ Br ₂ N ₂ O ₄ ", Acta Crystallogr, Section C: Cryst. Struct Commun, (1991) C47 (12), 2615-2618						
	NR	Medrano, "Roles of Colchicine Rings B and C in the Binding Process to Tubulin", Biochemistry, (1989), 28 (13), 5589-5599						
Examiner					Date Considered:			
*EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP § 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.								

FORM PTO-1449 (modified) To: U.S. Department of Commerce Patent and Trademark Office INFORMATION DISCLOSURE STATEMENT BY APPLICANT	Attorney Docket No.	Client Ref.
	056291-5137	Z70457-1P US
	Applicant: Davis et al.	
	Appln. No.: 09/869,925	
	Filing Date: July 9, 2001	
Date: September 8, 2003	Page 5 of 9	Examiner: Lukton, David Group Art Unit: 1653

U.S. PATENT DOCUMENTS							
Examiner's Initials*		Document Number	Date MM/YYYY	Name (Family Name of First Inventor)	Class	Sub Class	Filing Date (if appropriate)
	AR						
	BR						
	CR						

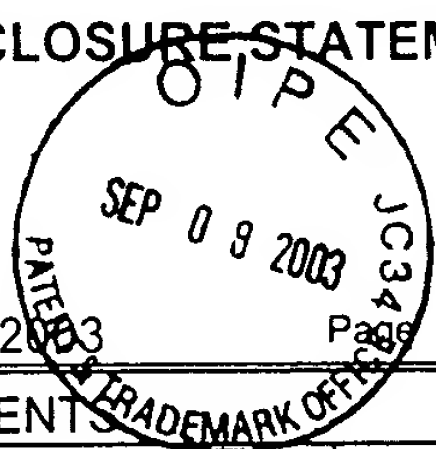
FOREIGN PATENT DOCUMENTS							English Abstract		Translation Readily Available	
		Document Number	Date MM/YYYY	Country	Inventor Name		Enclosed	No	Enclose	No
	DR									
	ER									
	FR									

OTHER (Including in this order Author, Title, Periodical Name, Date, Pertinent Pages, etc.)										
	GR	Menéndez et al., "A Thermodynamic Study of the Interaction of Tubulin with Colchicine Site Ligands", J. Biol. Chem., (1989), 264, (28), 16367-16371								
	HR	Olszewski et al., "Potential Photoaffinity Labels for Tubulin. Synthesis and . . . Colchicine, Combretastatin, and 3,4,5-Trimethoxybiphenyl", J. Org. Chem., (1994), 59 (15) 4285-4296								
	IR	Ondra et al, "Colchicinoide – Ihre Toxizität Und Biologische Aktivität", Acta Univ Palacki Olomuc Fac Med, (1995) 139, 17-18								
	JR	Palmquist et al., "Anodic Oxidation of Phenolic Compounds. 4. ^{1a} Scope and Mechanism of the Anodic Intramolecular Coupling of Phenolic Diarylalkanes", J. Am. Chem. Soc., (1976), 98(9), 2571-2580								
	KR	Perez-Ramirez et al., "Cosolvent Modulation of the Tubulin-Colchicine GTPase-Activating Conformational Change: Strength of the Enzymatic Activity", Biochemistry, (1994), 33 (20), 6262-6267								
	LR	Perez-Ramirez et al., "Linkages in Tubulin-Colchicine Functions: The Role of Ring C (C') Oxygens and Ring B in the Controls", Biochemistry, (1998), 37 (6), 1646-1661								
	MR	Perez-Ramirez et al., "Stoichiometric and Substoichiometric Inhibition of Tubulin Self-Assembly by Colchicine Analogues", Biochemistry, (1996), 35 (10), 3277-3285								
	NR	Perez-Ramirez et al., "The Colchicine-Induced GTPase Activity of Tubulin: State of the Product. Activation by Microtubule-Promoting Cosolvents," Biochemistry, (1994), 33 (20), 6253-6261								

Examiner	Date Considered:
----------	------------------

*EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP § 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

FORM PTO-1449 (modified) To: U.S. Department of Commerce Patent and Trademark Office INFORMATION DISCLOSURE STATEMENT BY APPLICANT	Attorney Docket No.	Client Ref.
	056291-5137	Z70457-1P US
	Applicant: Davis et al.	
	Appln. No.: 09/869,925	
	Filing Date: July 9, 2001	
Date: September 8, 2003	Examiner: Lukton, David	Group Art Unit: 1653



U.S. PATENT DOCUMENTS						
Examiner's Initials*	Document Number	Date MM/YYYY	Name (Family Name of First Inventor)	Class	Sub Class	Filing Date (if appropriate)
	AR					
	BR					
	CR					

FOREIGN PATENT DOCUMENTS						English Abstract		Translation Readily Available	
	Document Number	Date MM/YYYY	Country	Inventor Name		Enclosed	No	Enclose	No
	DR								
	ER								
	FR								

OTHER (Including in this order Author, Title, Periodical Name, Date, Pertinent Pages, etc.)									
	GR	Powell et al., "Role of Ring C Substituents Related to Alcolcolchicine on Antitubulin Action", Med. Chem. Res., (1996), 164-173							
	HR	Prakash et al., "Aging of Tubulin at Neutral pH: Stabilization by Colchicine and its Analogues", Archives of Biochem & Biophysics (1992), 295 (1), 146-152							
	IR	Pyles et al., "Role of the B-Ring Substituent in the Fluorescence of Colchicinoid-Tubulin and Alcolcolchicinoid-Tubulin Complexes", Biochemistry, (1992), 31 (31), 7086-93							
	JR	Rossi et al., "Structural Analysis of the Substoichiometric and Stoichiometric Microtubule-Inhibiting Biphenyl Analogues of Colchicine", Biochemistry, (1996), 35 (10), 3286-3289							
	KR	Schönharting et al., "Metabolic Transformation of Colchicine I. The Oxidative Formation of Products from Colchicine in the Udenfriend System", Hoppe-Seyler's Z. Physiol.Chem., (1973), 354 (1), 421-436				x			
	LR	Shearwin et al., "Effect of Colchicine Analogues on the Dissociation of $\alpha\beta$ into Subunits: The Locus of Colchicine Binding", Biochemistry, (1994), 33 (4), 894-901							
	MR	Shi et al., "Antitumor Agents Part 184 ¹) Syntheses and Antibutulin Activity of Compounds Derived from Reaction of Thiocolchicone with Amiens: Lactams, Alcohols, and Ester Analogs of Allothiocolchicinoids", Helv Chim Acta, (1998), 81, 1023-1037							
	NR	Shi et al., "Antitumor Agents. 183. Syntheses, Conformational Analyses, and Antitubulin Activity of Allochiocolchicinoids", J. Org. Chem., (1998), 63, 4018-4025							

Examiner	Date Considered:
*EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP § 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.	

FORM PTO-1449 (modified) To: U.S. Department of Commerce Patent and Trademark Office				Attorney Docket No.		Client Ref.			
				056291-5137		Z70457-1P US			
				Applicant: Davis et al.					
				Appln. No.: 09/869,925					
INFORMATION DISCLOSURE STATEMENT BY APPLICANT				Filing Date: July 9, 2001					
				Examiner: Lukton, David		Group Art Unit: 1653			
Date: September 8, 2003 <div style="position: absolute; top: -50px; left: 100px; border: 1px solid black; border-radius: 50%; padding: 5px; text-align: center;"> O I P E SEP 08 2003 JCS4343 </div>				Page 7 of 9					
U.S. PATENT DOCUMENTS									
Examiner's Initials*		Document Number	Date MM/YYYY	Name (Family Name of First Inventor)		Class	Sub Class	Filing Date (if appropriate)	
	AR								
	BR								
	CR								
FOREIGN PATENT DOCUMENTS									
		Document Number	Date MM/YYYY	Country	Inventor Name	English Abstract		Translation Readily Available	
						Enclosed	No	Enclose	No
	DR								
	ER								
	FR								
OTHER (Including in this order Author, Title, Periodical Name, Date, Pertinent Pages, etc.)									
	GR	Shi et al., "Antitumore Agents. 172. Synthesis and Biological Evaluation of Novel Deacetamidothiocolchicin-7-ols and Ester Analogs as Antitubulin Agents", J. Med. Chem., (1997), 40, 961-966							
	HR	Staretz et al., "Synthesis, Photochemical Decomposition, and Tubulin Binding of 10-Azido-10-demethoxycolchicine and 9-Azido-9-demethoxyisocolchicine", J. Org. Chem., (1991) 56 (1), 428-432							
	IR	Sterzl et al., "Effect of Colchicine Derivatives on the Antibody Response Induced <i>in vitro</i> ", Folia Microbiol. (Prague), (1982), 27 (4), 256-266							
	JR	Tang-Wai et al., "Structure Activity Relationships in the Colchicine Molecule with Respect to Interaction with the Mammalian Multidrug Transporter, P-Glycoprotein", Heterocycles, (1994), 39 (1) 385-403							
	KR	Timbekov et al., "Mass-Spectrometric Study of New Alkaloids from Plants of the Family Liliaceae", Khim. Pri. Soedin, (1985) (1) 3-11 (in Russian) (English translation attached)							
	LR	Tojo et al., "The Dibenzocycloheptylamine Alkaloids", J. Nat. Prod., (1989), 52 (5), 1163-1166							
	MR	Ward et al., "Energy Transfer Studies of the Distance between the Colchicine, Ruthenium Red, and BisANS Binding Sites on Calf Brain Tubulin", Biochemistry, (1994), 33 (39), 11900-11908							
	NR	Ward et al., "Energy-Transfer Studies of the Distance . . . Binding Sites on Calf Brain Tubulin", Biochemistry, (1988), 27 (5), 1508-1514							
Examiner					Date Considered:				
*EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP § 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.									

FORM PTO-1449 (modified) To: U.S. Department of Commerce Patent and Trademark Office				Attorney Docket No. 056291-5137		Client Ref. Z70457-1P US	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT				Applicant: Davis et al.			
				Appln. No.: 09/869,925			
				Filing Date: July 9, 2001			
				Examiner: Lukton, David		Group Art Unit: 1653	
Date: September 8, 2003				Page 8 of 9			

U.S. PATENT DOCUMENTS							
Examiner's Initials*		Document Number	Date MM/YYYY	Name (Family Name of First Inventor)	Class	Sub Class	Filing Date (if appropriate)
	AR						
	BR						
	CR						

FOREIGN PATENT DOCUMENTS						English Abstract		Translation Readily Available	
		Document Number	Date MM/YYYY	Country	Inventor Name				
						Enclosed	No	Enclose	No
	DR								
	ER								
	FR								

OTHER (Including in this order Author, Title, Periodical Name, Date, Pertinent Pages, etc.)									
	GR	Wolff et al., "Cochicine Binding to Antibodies", J. Biol. Chem., (1980) 255 (15), 7144-7148							
	HR	Wosikowski et al., "Identification of Epidermal Growth Factor Receptor and c-erbB2 Pathway Inhibitors by Correlation With Gene Expression Patterns", J. Natl. Cancer Inst., (1997), 89 (20) 1505-1515							
	IR	Xie et al., "Synthesis of three new Schizandrin Analogues", Chin. Chem. Lett., (1998) 9 (7) 631-634							
	JR	Yusupov et al., "A Study of 2-Demethylallocalchicine and Its Derivatives", Khim. Priro. Soedin., (1973), (2), 194-196 (in Russian) (English translation attached)							
	KR	Zh Obshch Khim., (1994) 64(5) 856-864 (in Russian)							
	LR	Zweig et al., "Inhibition of Sodium Urate-Induced Rat Hindpaw Edema by Colchicine Derivatives: Correlation with Antimitotic Activity", J. Pharmacol. Exp. Therapeutics, (1972), 182(2), 344-350							
	MR	Zweig et al., "Interaction of Some Colchicine Analogs, Vinblastine and Podophyllotoxin with Rat Brain Microtubule Protein", Biochemistry Pharmacology, (1973), 22, 2141-2150							
	PR	Hunter et al., "The photo-oxidation of some novel Colchicine derivatives", Afinidad, Vol, 38, No. 372, 1981, pp. 122-123							
	NR								

Examiner	Date Considered:
----------	------------------

*EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP § 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

FORM PTO-1449 (modified)
To: U.S. Department of Commerce
Patent and Trademark Office

Attorney Docket No.

Client Ref.

056291-5137

Z70457-1P US

**INFORMATION DISCLOSURE STATEMENT
BY APPLICANT**

Applicant: Davis et al.

Appln. No.: 09/869,925

Filing Date: July 9, 2001

Date: September 8, 2003

Page 9 of 9

Examiner: Lukton, David

Group Art Unit: 1653

U.S. PATENT DOCUMENTS

Examiner's Initials*	Document Number	Date MM/YYYY	Name (Family Name of First Inventor)	Class	Sub Class	Filing Date (if appropriate)
AR						
BR						
CR						

FOREIGN PATENT DOCUMENTS

Document Number	Date MM/YYYY	Country	Inventor Name	English Abstract	Translation Readily Available
				Enclosed	No
DR					
ER					
FR					

OTHER (Including in this order Author, Title, Periodical Name, Date, Pertinent Pages, etc.)

OR	Kang et al., "n-acetylcolchinol 0-methyl ether and thiocolchicine, potent nalogs of colchicine modified in the C-ring" Journal of Biological Chemistry, Vol. 265, No. 18, June 25, 1990, pp. 10255-10259, XP002081868, ISSN: 0021-9258				
GR	Timbekov et al., "Mass Spectrometric Study of Alkaloids of the Homoaprophine, Homomorpine and Allocolchicine Series", "Tezisy Dokl. = Sov.-Indiiskii Simp. Khim. Priir. Soedin., 5th (1978), p. 85 (Chemical Abstracts attached)				
PR	Mackay et al., "Structures of Colchicine Analogues. I. Allocolchicine", Acta Cryst, (1989), C45, 795-799				
HR					
IR					
JR					
KR					
LR					
MR					
QR					
NR					

Examiner

Date Considered:

*EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP § 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.